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Female leadership in French voluntary associations

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ABSTRACT

Abstract: Drawing on a recent national survey, this paper focuses on the female representation on executive committees in French voluntary associations. To begin with, we observe that this representation is very unequal according to the different officer positions. It is especially low among presidents. Then we study the relationship between the associations' attributes and the likelihood of women being appointed as executive committee members. We notice that the probabilities that women hold president, treasurer and secretary positions are highly correlated to each other. We find that the proportion of female officers is higher in organizations whose activities pertain to social service, health and humanitarian sectors. It is lower in the oldest associations and it decreases as their geographical area of activity increases and as their budget becomes larger. The probability that associations have female presidents is higher in associations with few volunteers.

TEXT

1. Introduction

The voluntary leaders of a nonprofit organization are vested with important missions. They have to make sure that their organization complies with its primary goals. They are also responsible for its long-term economic viability. Therefore, they have to anticipate and supervise the adaptations required by its changing environment. They play an important role by forming and maintaining relations outside the organization, particularly with institutional partners and public authorities. Competences of leaders are critical for the efficacy and legitimacy of nonprofit organizations. Consequently, it is not surprising that researchers in the nonprofit sector show an increasing interest in board governance and the relations between the functioning of boards and the organizational performances (see for instance: Bradshaw, Murray & Wolpin, 1992; Herman & Renz, 2000; Iecovich, 2004; Preston & Brown, 2004; Chait, Ryant & Taylor, 2005; Brown, 2005, 2007; Zimmermann & Stevens, 2008).

Research has also dealt with the composition of boards. It has usually been shown that the world of voluntary leaders is neither representative of society at large, nor of the nonprofit organizations' membership. Attention has been notably paid to the low representation of women among leaders (see for instance: Chamberlain, 1988; Odendhal &Youmans, 1994; Shaiko, 1996, 1997; Pynes, 2000). As part of this research work, relations between female leadership and the attributes of organizations have been investigated. For instance, it has been emphasized that women are more likely to be found on boards of nonprofit organizations which are not very prestigious and which have small budgets (Babchuck, Marsey & Gordon, 1960; Odendhal & Youmans, 1994; Bradshaw, Murray & Wolpin, 1996; Iecovich, 2005). However, Shaiko (1997) does not observe a negative influence of the increase in organizational budget size on female nonprofit leadership. On the other hand, this author finds that the older they are, the less often

nonprofit organizations have women on their boards, a conclusion which is not corroborated by Bradshaw, Murray and Wolpin (1996).

From Israeli data, Iecovich (2005) argues that the more organizations are financed by government funds, the more likely they are to have a smaller proportion of females on boards. On the contrary, from Canadian data, Bradshaw, Murray and Wolpin (1996, p. 250) find that this proportion is "positively related to the funding from mainly government grants". They also notice that the representation of women among voluntary leaders decreases when interorganizational linkages extend, perhaps because such linkages expose nonprofits to a conservative and sex biased influence from other organizations (Thomson, 1995). Nevertheless, the authors do not rule out another direction of causality to explain this observation. Referring to Zald (1969), they evoke the possibility that women are less numerous on boards of larger and more connected organizations because they have less access to scarce resources.

The representation of women among leaders is also different from one type of organization to another. In particular, it is more important in health and human service organizations (Odendahl & Youmans, 1994). Among the public interest organizations, it is lower in business/economic and public interest law organizations and higher in community/grassroots and civil/constitutional rights ones (Shaiko, 1996). However, Iecovich (2005) does not find any difference with regard to the proportion of women on boards according to the different activity sectors that she has observed.

The sexual division of tasks among leaders has been also documented. Chamberlain (1988) underlines that women serve less frequently than men do on the most important committees of boards. In the same vein, Odendhal & Youmans (1994, p. 207) write that, on prestigious boards, "women plan the parties, while men make the policies". Thomson (1995) observes a sex bias in officer selection inside nine upstate New York voluntary emergency medical service squads. Though the access to leadership positions taken as a whole is not sex discriminated, men hold

more frequently the line officer positions, which are invested with the decision-making power, while women have a higher probability to be staff (administrative) officers. According to Pynes (2000), one can observe that, once on boards, males and females are very unequally distributed among officer positions. Males predominate over females as presidents and treasurers while the opposite is true with respect to secretary positions.

These studies give useful pieces of information but several results appear to be a matter of controversy and call for further investigations. In addition, this research often concerns a restricted number of nonprofit organizations or only some particular types of them. For instance, Chamberlain (1988) examines trustees of Colleges and Universities. Pynes (2000, p. 46) analyses a sample from which smaller nonprofit organizations are "deliberately excluded". The specificity of samples may explain the disparity of results between studies. Thus, after analyzing data concerning 73 civic organizations located in a northeastern city of United States, Babchuck, Marsey and Gordon (1960, p. 402) conclude that "more women are found on the boards of expressive agencies", Young (1975, p. 275) observes that, in a British housing estate, women are in a majority as leaders in instrumental associations. Lastly, we have to notice that very little research deals with European countries, probably for lack of data (Flahaut & Guardiola, 2009). Concerning France, Prouteau and Wolff (2002) using a time-budget survey conducted in 1999 by INSEE, which is the French national statistical institute, observe an underrepresentation of women among volunteers who perform tasks with responsibilities in their associations. However the survey they use does not allow them to go thoroughly into the subject. Drawing from another French data set, Tabariés and Tchernonog (2005) investigate female leadership in nonprofit organizations. They find that the existence of all-female executive committees makes the access of women to leadership positions easier, especially for categories such as non-working women.

Because the representation of women among leadership positions in nonprofit organizations is an issue of importance to know more about the democratization of civil society and to promote

it (Reverter-Bañón, 2006), it deserves greater attention. The aim of this paper is to carefully focus on the French case. For this purpose, we draw on a rich data set collected in 2005 from voluntary associations. The next section describes the data we use. It also presents descriptive statistics concerning the degree of feminization of leadership in associations. In section 3, we analyse the influence of some association characteristics on the probability that women are appointed as members of executive committees. Section 4 concludes.

2. Data and descriptive statistics

In France, voluntary associations governed by the 1901 Law constitute the great majority of the nonprofit sector. Unfortunately up to now, the public statistical services have not been very interested in nonprofit organizations. There are no regular association surveys comparable with those which concern for-profit enterprises. Consequently, for the purpose of our analysis, we draw on a survey conducted by a research team from the Sorbonne Economics Center in Paris. To make up for the lack of data on non-profit organizations, this team seeks to provide a quantitative outline of the sector including associations without paid employees (i.e. only volunteer-staffed) which are little known and poorly documented. The work of this team is based on large-scale postal surveys (carried out in 1999 and 2005). Questionnaires were sent out to voluntary associations from town halls which provided the researchers with their organizational support. Indeed local government authorities have quite good knowledge of the non-profit sector. They keep their lists of organizations up to date and these lists do not just include the non-profit ones with which they have financial links or which provide town halls with services (Tchernonog, 2007b).

In this paper, we use the 2005 survey which covers 9,265 organizations present in all types of activity and throughout the country. The image of the association world that it shows is consistent with what we know from other research work on this subject. However, though markedly in a majority in this sample, associations without paid employees are a bit

underrepresented. Their voluntary leaders have been less inclined to answer the questionnaire, probably because they lacked time and could not delegate this task to an employee.

The data include about 100 variables which relate to numerous aspects of organizations: the activity sector, the date of creation, the number of paid and voluntary workers, budget, type of financing, geographical field of activity, region of location, etc. Some characteristics of the associations which have answered questionnaires are reported in Table 1[1].

Table 1 Here

As regards the number of organizations, sport, culture and leisure are the three predominant sectors since they account for almost six associations out of ten[2]. Next we find organizations which defend rights and promote causes and, but quite far behind, those devoted to health and social services. Associations are still less numerous in other sectors such as those related to education, economic and local development as well as charity and humanitarian action. However, this account may be misleading as to the economic weight of these sectors in the association world. Many sport, leisure or culture nonprofit organizations are small in size while the largest voluntary associations are found in social service, education and heath sectors. The aggregated budget of organizations belonging to these three last-mentioned sectors represents almost 60% of the entire association budget while they account for only 17.8% of the total number of associations.

There is no religious sector in this list. Considering this question, we have to distinguish between two types of organizations. First, there are those which are religious-affiliated but which carry out activities such as education, sport, leisure and so on. In Western France, the association world is often characterized by duality: in many places, there exist together both Catholic voluntary associations and lay ones in activities such as sport, leisure and culture. Such organizations have been classified in sectors according to their types of activity, whatever their religious or ideological affiliation. Secondly, there are religious associations in the literal sense. They are aimed

at teaching and spreading religious faith. In France, this type of associations does not come under the 1901 Law. It is governed by the 1905 Law regarding the separation of church and the State. As a consequence, such associations have been discarded by the survey. But it is possible that a few of them have been registered in the "other" sector of the statistical tables.

46% of nonprofit organizations have existed for less than 20 years. This observation is consistent with the great dynamism of the association world observed in France during the last three decades. Indeed, while around 20,000 voluntary associations were set up every year in the middle of the seventies, this number has often exceeded 60,000 since the beginning of the nineties. From table 1 we can also observe that one association out of two has a geographical activity area limited to the commune or the urban district in which it is based[3]. Only one out of twenty has an international horizon. 60% of associations have 100 members at the most while only less than 3% have over 1000 members. Half of all organizations have an annual budget which is below 50,000 euros (i.e. around 66,000 dollars in May 2009). More than two thirds have no paid employees and this result is certainly underestimated as mentioned above[4]. Overall, small associations are in a majority in this survey sample.

Voluntary associations may belong to federations or networks of organizations. Federation membership is mandatory for associations such as fishing and hunting ones or sport associations which deliver cards allowing entry into official competitions. In other cases, this membership is only voluntary. As shown in table 2, almost six associations out of ten belong to a federation or a network. If we consider these affiliations according to the activity sectors, we can notice that they are particularly numerous in sport activities where 80% of associations are members of federations, which is not a surprise in view of the above remark about the mandatory affiliation which often concerns this type of organizations. Defense of right activities, health and social services are also sectors where associations are more frequently affiliated than average. On the

contrary, these interorganizational links are less frequent in leisure and cultural activities as well as in humanitarian and educational sectors.

The Sorbonne Economics Center survey also includes some information (unreported here) on paid employees in associations. In particular, we can observe that women represent the majority of employees (68.7%) but the female proportion drops in executive positions since it amounts to only 48.4% of all directors. In addition, the survey provides details about the profiles of voluntary leaders such as presidents, secretaries and treasurers. The structure of association governance and the mode of recruitment to leadership positions may vary from one association to another (Tchernonog 2007a). However this process is very often as follows. The general assembly, bringing together the members of the association, elects people who make up the trustee board. Then, to set up the executive committee, these board members appoint three of themselves as president, treasurer and secretary. The executive committee takes on the daily responsibilities and thereby it is the main decision-making organ in the voluntary association. For each officer position on the executive committee, the extent of power and the length of mandate are defined by the bylaws of the organization. The president is the leader who is vested with the highest authority. He (or she) represents the association in relations with other organizations or public authorities. He has the power to sign contracts and documents which commit the association. He is legally liable for its activities. The treasurer is vested with financial control while the secretary is in charge of administrative tasks such reports of meetings and so on[5].

The information collected on the members of executive committees from the 2005 survey makes it possible to analyze the profiles of these leaders within the context in which voluntary associations operate. Information was gathered on 27,000 non-profit officers, allowing them to be identified in terms of sex, age, social and professional class, their labor market participation, their seniority in their associations and whether or not they were involved in the founding of the

organization. In the present paper, we focus on the gender characteristic. Table 2 reports some descriptive statistics about the gender distribution of executive committee members.

Table 2 Here

Officer positions vary substantially with respect to their feminization. Women represent less than one president out of three. They are still a minority among treasurers, even if their proportion is higher. On the contrary, they are markedly more numerous than men as secretaries. These results are consistent with those observed by Pynes (2000). Therefore, female representation in leadership positions appears inversely related to the extent of power generally associated with these positions: the greater the power, the less the female representation. It would be interesting to immediately compare the proportion of women among leaders with their proportion as members of associations. Unfortunately, it is impossible from the survey because it gives only details on the size of membership but not on the characteristics of each member. To obtain information on female membership, we have to turn to the survey on the participation in associations conducted by INSEE in 2002 (Febvre & Muller, 2003)[6]. From the data collected by this survey, women represent 47 percent of voluntary association members. If we compare this result with the female proportions in the different positions of leadership, we can conclude that women are principally underrepresented as presidents and, to a lesser extent, as treasurers.

One quarter of all voluntary associations have no female members on executive committees whereas 15% have no men on these governing bodies. Overall, men are the majority on executive committees in a little less than six associations out of ten. These observations confirm the existence of a male domination among voluntary association leadership positions. However, the gender composition of officers varies according to the attributes of associations (see table 3). Women play a more important role in associations dedicated to health, social service and charity. As presidents, they are even close to parity with men in the social service sector. In this sector, all-female executive committees are frequent since they are observed in around one association

out of four. We can therefore deduce that leadership positions are more open to women in organizations whose activities are reminiscent of tasks that the traditional sexual division of labor had assigned to the female population (caring, nursing and so on). Women are also more represented than average on executive committees in leisure and cultural associations. On the contrary, they are seriously underrepresented as officers in nonprofit organizations which are devoted to sport, to defense of rights or promotion of causes and, though less markedly, to economic and local development. In sport associations as well as in the ones dedicated to defense of rights and promotion of causes, more than one third of organizations have all-men executive committees while all-female ones do not reach ten percent of the total. In these types of associations, there are not more than two executive committees out of ten which have a female president and women are in a minority even among the secretaries.

Table 3 Here

As evidenced by table 3, the executive committees of the oldest associations are the least feminized ones, with a particularly low proportion of female leaders in organizations which are more sixty years old. Women are better represented in associations which are less than forty years old, i.e. those which have been founded since 1965 and principally since 1975. It is important to remark that female activity rate begins to significantly increase in France from the end of Sixties.

Women hold more frequently leadership positions in associations having a narrow geographical area of activity i.e. an area restricted to a commune or an urban district. This result echoes the view of Odendhal and Youmans (1994) according to whom females are more equitably represented on boards of community based organizations. However it is interesting to note that women are not less frequently appointed to executive committees in associations which have international horizons than they are in organizations whose area of activity is the department, the region or the whole country. In the former, the female proportion among presidents is even

higher than it is in the latter. This may perhaps result from the fact that organizations with more important female membership and leadership, such as the ones which are dedicated to humanitarian action, are more represented among the associations having international activities. We have to verify if this result stands up to a multivariate analysis.

The organizations with the greatest number of members are less propitious to female leadership, whatever the officer positions we consider. The influence of economic weight seems more ambiguous. On the one hand, we can note that the proportion of female treasurers and the one of all-female executive committees are markedly lower in the associations with the biggest budgets, suggesting that there is a male priority in the leadership positions invested with a high degree of financial responsibility. On the other hand, the proportion of female presidents does not drop with the increased budgets of associations. We can also observe that the relation between the degree of female representation among presidents and the number of paid employees in associations has an inverted U-profile. The associations which are only volunteer-staffed have the lowest propensity to appoint women as presidents. In the organizations with a remunerated workforce, this propensity increases with the number of employees up to 20 and then it drops. Such a decrease in the largest associations with wage earners is also observed for the treasurer position but not for the secretary one. Finally, with the exception again of the secretary position, the access of women to executive committees seems more difficult in organizations which belong to a federation or a network. Such an observation supports the previous finding of Bradshaw, Murray and Wolpin (1996).

These statistical results, suggestive though they may be, do not allow us to draw sound conclusions about the influence of each association characteristic on the propensity of women to be executive committee members because we do not control for other association attributes. For instance, the above-mentioned relation between the proportion of women among presidents and the affiliation to a federation might be a mere expression of a sector-based effect if organizations

with male-dominated membership and leadership (such as sport associations) also belong more frequently than average to federations. In order to disentangle the effects of all these characteristics on the appointment of women to executive committee positions, we turn to a multivariate investigation.

3. Influence of association attributes on the feminization of leadership

For this purpose, we use a Probit model to accommodate the dichotomous nature of the dependent variable, that is, the gender of leaders in each officer position. However, a difficulty arises out of frequent, though not systematic, simultaneity of officer appointment procedures. Indeed, the three executive committee members are often jointly elected by the general assembly or by the trustee board of associations. So, it is realistic to consider that the nominations of the three officers are mutually dependent. To allow for such an interdependence, we use a multivariate (trivariate) Probit model (Greene, 2003). We have three dichotomous dependent variables, one for each leadership position, which take the value 1 if the officer is a woman and 0 otherwise. Residuals of three equations have a trivariate normal distribution with variance 1 and correlations ρ_{12}, ρ_{13}, ρ_{23} (for details, see appendix).

As explanatory variables we include activity sector and age of associations, their geographical area of activity as well as their possible affiliation to a federation or a network. We also add a variable distinguishing the associations with paid employees from those which are only volunteer-staffed and another one which measures their economic weight valued from their annual expenses. Rather than the number of members in associations, we prefer to retain the number of volunteers. Though any member of an association can become an executive committee member, candidates to leadership functions often have to show their propensity to be actively engaged in the life of the association and its various tasks. So, it is plausible to think that volunteers represent the principal ground for recruiting leaders. Indeed, Tabariés and Tchernonog (2005) show that about 60% of presidents and 57% of treasurers were volunteers before becoming

officers. Finally, we also control for regions where organizations are located because there may exist geographical differences in the attitude of associations towards feminization of leadership (Abzug, DiMaggio, Gray, Useem & Kang, 1993).

We estimate two trivariate Probit models. The first one is applied to associations as a whole. The second model concerns only associations with paid workforce. A certain number of associations have not answered all the questions in the questionnaire. For instance, more than 800 of them do not give the gender composition of all executive committee members. After deleting incomplete observations concerning dependent and independent variables, there remain 5,709 voluntary associations. Missing data might be a source of bias. Consequently, we have made complementary investigations to further examine this risk. Firstly we have scrutinized the known attributes of deleted organizations to compare them with those of the retained associations. The former do not appear to differ greatly from the latter. Among the discarded observations, associations which defend rights and promote causes as well as those having the lowest budgets and those without paid employees are slightly overrepresented while the ones which are dedicated to sport activities are somewhat underrepresented. Overall, in the effective sample, i.e. the sample without missing data, the proportion of very small associations is a bit lower than it is in global sample.

To test the soundness or our estimates from the effective sample, we have also run a trivariate Probit model on an enlarged sample which keeps observations with unknown values of independent variables. For this purpose, we assign the missing values for each variable to a supplementary category created for the occasion. When we compare the results from this enlarged sample (unreported here) with those drawn from the sample without missing data, we observe that the former and the latter tend towards the same conclusions, the observed differences concerning principally the level of significance of some coefficients. Consequently,

though the existence of bias cannot be completely ruled out, we tend to be rather trustful of our results.

First, we present estimates for associations as a whole, whether they have employees or not. From table 4, we can observe that the correlation coefficients of the error terms of the three equations are positive and highly significant, which confirms the assumption of interdependence between the appointments of executive committee members. In other words, these results suggest that the unobserved factors which increase the probability that a particular officer position is held by a woman play the same role with respect to any other officer position.

Table 4 Here

Concerning the effects of associations' characteristics on the probability that each executive committee position is filled by a woman, the results of our multivariate analysis confirm several observations drawn from descriptive statistics but also gives new useful clarifications. Several variables have a quite similar influence upon the likelihood that women hold a leadership position, whatever the position considered. For instance, the associations dedicated to social services, charity - humanitarian action and social services exhibit the highest probabilities to name women as presidents, as treasurers and as secretaries. On the contrary, sectors such as sport, defense of rights - promotion of causes as well as economic and local development are those which are the less inclined to female leadership. This situation mirrors the unequal degree of female membership in associations according to the different activity sectors (Febvre & Muller, 2003).

The access of women to officer positions is easier in organizations with paid workforce than it is in associations which are only volunteer-staffed. However, the feminization of leadership is statistically significantly lower in associations where the annual budget exceeds 100,000 euros and even, with respect to the function of president, as soon as it goes beyond 25,000 euros. As regards presidents, such a result was not so clear from table 3. In addition, it is more difficult for

women to take on responsibilities on executive committees in old voluntary associations, that is to say those being over 40 years old and those over 30 years for the treasurer function.

Associations whose activity extends beyond the communes or urban districts in which they are based are less inclined to have women who serve on executive committees than the purely local associations. However, this result needs to be nuanced concerning the organizations with international horizons. Indeed, if the coefficient associated with this category of associations is significantly negative for the treasurer position, it is only at the 10% level for the president position and it is not significant for the secretary one. We can also observe that the female representation among presidents and secretaries is negatively affected by federation or network affiliation of associations but the coefficient of this variable, though negative, is not statistically significant with respect to treasurers. Geographical location of organizations does not seem to have a noticeable influence on women's participation on executive committees. However associations which are located in Eastern or Northern France are less inclined to appoint female presidents. Such a result appears difficult to explain.

The impact of the number of volunteers on the participation of women on executive committees deserves particular attention. Though this variable has no effect on treasurer and secretary positions, it plays a significantly role on the likelihood of presidencies being held by women: the greater the number of volunteers in associations, the lower the probability that the president position is entrusted to a woman. This result is rather surprising and, to the best of our knowledge, there is no trace of it in the previous literature on the female leadership in nonprofit organizations. It could be argued that the number of volunteers is an indicator of the association membership size if, as is probable, the former is an increasing function of the latter. Therefore, the observed effect would point to the negative influence of the increased membership size on the probability that an association has a female president rather than to the impact of the volunteers' number per se. Indeed, the correlation coefficient between the number of members

in associations and the number of volunteers is significantly positive but it is not very high (0.21). In addition, when we include the membership size as covariate, we do not observe any significant effect from this variable[7]. Consequently, the observed result pertains to an effect specific to the number of volunteers. How do we account for such a negative correlation? Without pretending to an exhaustive explanation, we suggest the following perspective. The low female representation among presidents shows that nonprofit organizations have a propensity to appoint a man rather than a woman to assume the presidency which is the most powerful position. Such a propensity has several possible reasons which are not mutually exclusive. It may pertain to a more or less subtle sexist behavior by members. It may also denote a more or less spontaneous reluctance from women to hold a skill demanding position with high liability, because they lack self-confidence for instance[8]. As already mentioned, volunteers represent a breeding ground for leadership in associations even if other non-volunteer members may be named as participants to executive committees too. When there are few volunteers, there are also probably few candidates for the president position and women may have a higher probability to be appointed to this position. Indeed, in these circumstances, the members who would have preferred to recruit a man will be more inclined to accept a woman for want of an alternative solution. On the other hand, women will be less likely to be doubtful of their own capacities because they are less subject to competition from men. In short, if our hypothesis is correct, the lower the number of volunteers is, the less intense the potential competition between men and women to assume the presidency and the higher the probability that a female member is appointed to this position. Of course, this line of argument requires confirmation and a more thorough examination from other data sets in France and different countries.

It would have been interesting to examine whether the women's participation on executive committees is sensitive to the type of financial resources received by associations, particularly by differentiating public grants and market resources. Unfortunately, because the answers pertaining to this subject from the 2005 survey are scarce and often questionable, such an examination

would require a considerable reduction of the effective sample. For information only, a research has been conducted on a small number of observations. We do not find that the proportion of grants to total resources affects the probability of women being on executive committees, but in no way can this result be considered as conclusive.

In a second phase of our study, we run a trivariate Probit model using only data concerning voluntary associations which have paid workforce. For this purpose, we include the same explanatory variable, except of course this relates to the distinction between organizations with employees and the all volunteer-staffed ones. We prefer not to include the number of employees as covariate. Indeed, in France, there are many part-time employees in voluntary associations (see Tchernonog, 2007b). Sometimes they do not work more than two or three hours a week. So, the number of employees may be a misleading indicator of the size of the workforce in voluntary associations. It would be preferable to use an indicator in terms of full time jobs, but the 2005 survey does not provide such a piece of information. We also could use the wage bill since the questionnaire included a question about it, but there are numerous missing answers. In order to avoid excessively cutting the sample size, we have preferred to keep the budget indicator estimated from total annual expenses. Voluntary associations have economic activities which pertain to service industries and which are labor intensive. Consequently, wage bills represent a substantial share of global expenses. Among the employee-staffed associations of the sample, the correlation coefficient between these two variables (when they are both documented) is very high since it amounts to 0.93. The budget therefore seems to be a good proxy for the size of workforce used by these nonprofit organizations. As described in table 5, the results are not substantially different from those previously evidenced in table 4. However, they sometimes present some particularities.

Table 5 here

Thus, the effect of activity sectors on the feminization of leadership in associations with paid employees is less in comparison to this effect in associations as a whole. Compared with the reference category which is represented by local development associations, leisure and social service organizations appear more inclined to have female executive committee members whatever the considered position. In addition, the secretary position is more accessible to women in cultural and sport sectors. The same sectors, as well as the health one, also have female treasurers more frequently. The female representation among officers is higher in local voluntary associations than it is in the ones where the geographical area of activity is wider. This representation is lower in the oldest organizations but this negative effect is only observed among organizations exceeding 60 years existence and not 40 years as is the case in table 4. The increase in budget tends to lessen the probability that officer positions are held by women, even if the relation between this indicator of economic weight and the feminization of leadership is not linear. The voluntary associations with the largest budget are particularly less inclined to female leadership. Once more, the network affiliation has a negative effect on the probability that presidents are women but we no longer observe such an influence on the secretary position. Interestingly enough, we notice that the increase in the number of volunteers is once again negatively correlated with the likelihood of having a female president while such an increase has no significant effect on the other positions. The geographical location of associations does not play any role in the participation of women on executive committees, whatever the officer positions are. Lastly, we observe that the correlation coefficient of the three position equations are highly significantly positive, which confirms the interdependence of the leaders' appointments.

4. Conclusion

In this paper, we investigate the representation of woman on the executive committees of French voluntary associations. We also examine if this representation is influenced by the attributes of

organizations. First we observe that the female representation is very uneven according to the different board positions, thereby confirming a sexual division among leaders which has already been documented by several authors in France and abroad. Women are more numerous than men among secretaries whose tasks are principally administrative, while they are a minority among treasurers and above all among presidents who are the holders of the greatest influence and the highest power in nonprofit organizations. Secondly, we show that the degree of feminization of leadership is correlated to the association characteristics. It is higher in organizations whose activities correspond to roles which have been assigned for a long time to women by the traditional division of tasks.

The frequency of female leadership decreases as the geographical area of activity of organizations increases and as their budgets become larger. The oldest associations are markedly less inclined to have women on executive committees. We find that a federation or network affiliation lessens the probability that a woman holds the president position. This same probability is also a decreasing function of the number of volunteers in associations. This result is rather new. To explain it, we suggest considering the number of volunteers as an indicator of potential competition between men and women for nomination to the presidency but such an explanation is open to discussion. Lastly, our study gives credence to the hypothesis of interdependence between the appointments of executive committees members. Indeed, the probabilities that women hold president, treasurer and secretary positions are highly correlated to each other.

As the representation of women among leaders of nonprofit organizations is an important issue, this topic calls for further research. Two questions seem particularly relevant to us. The first one concerns the reasons why women are underrepresented as presidents and treasurers. A better knowledge of these reasons is necessary to promote the access of women to leadership. The present male-biased appointment to such positions may be caused by gender discriminatory behaviors of the members of voluntary associations. It may also result from a lack of interest of

women themselves in these leadership positions either because of a lack of confidence in their capacities or because of the fear of liability. Answers to this question imply a better knowledge of the officer recruitment process in nonprofit organizations.

The second question concerning the female representation on boards relates to its possible change over time. Abzug and Galaskiewicz (2001) use data on the boards of 15 nonprofit organizations in six American cities at three different time periods (from 1931 to 1991). The authors observe that though the female proportion among leaders has increased during this period, "women have always been underrepresented on nonprofit boards given their percentage in urban population" (p. 58). To the best of our knowledge, no similar study has been conducted in France, certainly because of a lack of longitudinal data. In this country, the implementation of the Nonprofit Institution Satellite Account could be an opportunity to develop and improve surveys on voluntary associations in order to investigate such questions.

Appendix

A Trivariate Probit Model to investigate the effects of association attributes on the feminization of officer positions

Let y_1^*, y_2^* and y_3^* denote the three latent variables which indicate the propensity of associations to appoint woman respectively to president, treasurer and secretary positions. These variables are expressed as functions of a set of explanatory variables X and residuals ε_1, ε_2, ε_3. We have the following system of equations:

$$\begin{cases} y_1^* = \beta_1 X + \varepsilon_1 \\ y_2^* = \beta_2 X + \varepsilon_2 \\ y_3^* = \beta_3 X + \varepsilon_3 \end{cases}$$

Where β_i, for i =1 to 3, are parameters to be estimated.

Having a woman who holds an officer position is denoted by y_i for i =1 to 3. y_i is such that $y_i = 1$ if $y_i^* > 0$ and $y_i = 0$ otherwise.

The residuals ε_i, for i =1 to 3, follow a trivariate normal distribution with zero mean and variance normalized to united. The covariance matrix Σ is given by:

$$\Sigma = \begin{bmatrix} 1 & \rho_{12} & \rho_{13} \\ & 1 & \rho_{23} \\ & & 1 \end{bmatrix}$$

where ρ_{12}, ρ_{13} and ρ_{23} represent the correlations between the pairs of residuals $(\varepsilon_1, \varepsilon_2)$, $(\varepsilon_1, \varepsilon_3)$ and $(\varepsilon_2, \varepsilon_3)$. Because of symmetry in covariances, we have: $\rho_{ij} = \rho_{ji}$.

Such a model allows us to control for unobservable heterogeneity across associations. In other words, if there are unobservable association attributes which influence the recruitment of the

three executive committee officers, the model will be able to take them into account. For instance, if ρ_{12} the coefficient of correlation between the residuals of president and treasurer equations is significantly positive, this means that unobserved association attributes which increase the probability that the president position is held by a woman, also increase the probability that associations have a female treasurer. Conversely if this coefficient is significantly negative, we can conclude that unobservable factors which enhance the probability that the president is a woman decrease the likelihood of having a female treasurer.

If these equations are estimated separately as univariate Probit models, coefficients will be inefficient unless the correlation coefficients are non significant. Our estimations are carried out with Limdep's mvprobit command which uses the GHK (Geweke, Hajivassiliou, Keane) simulator to approximate the cumulative distribution function (see Green, 2003, p. 932-933).

NOTES

[1] Because all characteristics were not systematically documented, for each of them we have created an "unknown" category.

[2] In our classification, the sport sector includes hunting and fishing.

[3] France has several types of territorial subdivisions. In Metropolitan France, where this survey was conducted, below the national level there are 24 regions, 96 departments and more than 36,000 communes.

[4] Tchernonog (2007b) estimates the proportion of all French associations without paid employees at more than 80 %.

[5] Sometimes, but quite rarely, a vice-president is also elected. Such a function is not documented by the 2005 survey from Sorbonne Economics Center.

[6] The aim of this survey, which draws on a nationally representative sample of households, is to document the characteristics of individuals who participate in associations as well as the activities which they perform as participants.

[7] The same result stands if we substitute the membership size for the number of volunteers: the membership size variable has again no significant effect on the probability that the president is a woman.

[8] Perceived self-efficacy may have a great influence on the choice of activities (see Bandura, 1977, 1997).

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Table1. Some characteristics of French voluntary associations

Characteristics	Proportion (%)
Activity sector	
Leisure	16.2
Sport	24.6
Defense of rights and causes	13.4
Cultural activities	18.5
Health	5.6
Charity and humanitarian action	3.6
Social services	7.3
Economic and local development	4.2
Education, training and occupational integration	4.9
Other	1.1
Unknown	0.6
Age of associations	
Less than 10 years old	26.3
11 – 20 years	19.9
21 – 30 years	15.2
30 – 40 years	9.6
40 – 60 years	8.5
More than 60 years	6.8
Unknown	13.7
Geographical field of activity	
District or commune	50.8
Department	21.9
Region	11.2
Whole country	5.4
International	5.1
Unknown	5.6
Number of members	
20 at the most	14.0
21 – 50	24.7
51 – 100	21.5
101 – 1000	30.9
More than 1000	2.7
Unknown	6.2
Numbers of paid workers	
None (only volunteer staffed)	69.3
1 – 4	15.8
5 – 9	4.0
10 – 19	3.5
20 – 49	2.4
>= 50	1.2
Unknown	3.8
Annual budget	
1000 euros at the most	12.6
1000 – 2000 euros	8.9
2000 – 5000 euros	15.8
5000 – 10000 euros	12.8
10000 – 25000 euros	15.4
25000 – 100000 euros	14.2
More than 100000 euros	13.4
Unknown	7.0
Federation or network affiliation	
Yes	56.7
No	41.4
Unknown	1.9
Number of observations	9265

Source : Sorbonne Economic Center Survey 2005

Table 2. Women on executive committees in French voluntary associations (%)

Variables	Percentage
Proportion of women among executive committee members	
Presidents	31.4
Treasurers	42.3
Secretaries	58.2
Gender composition of executive committees	
Three men	26.1
Two men – one woman	31.1
President: man; treasurer: man; secretary: woman	18.9
President: man; treasurer: woman; secretary: man	8.2
President: woman; treasurer: man; secretary: man	4.0
Two women – one man	27.6
President: man; treasurer: woman; secretary: woman	15.4
President: woman; treasurer: man; secretary: woman	8.7
President: woman; treasurer: woman; secretary: man	3.5
Three women	15.2
Total	100.0

Source : Sorbonne Economic Center Survey 2005

Table 3. Feminization of leadership according to some characteristics of associations (%)

Characteristics of associations	Percentage				
	Female President	Female Treasurer	Female Secretary	Executive Committees without women	Executive Committees without men
Activity sector					
Leisure	38.8	50.8	64.9	20.7	22.6
Sport	18.6	36.2	48.6	36.6	9.7
Defense of rights and causes	20.4	32.5	44.4	42.1	9.4
Cultural activities	38.3	46.6	66.2	16.6	17.4
Health	42.1	50.7	68.9	13.1	18.6
Charity and humanitarian action	45.1	48.3	71.7	11.2	22.0
Social services	48.1	47.4	70.8	13.4	23.7
Economic and local development	28.5	38.0	53.6	28.2	9.5
Education and occupational integration	34.6	38.9	57.9	25.1	11.9
Other	28.7	38.3	53.2	23.4	9.6
Age of associations					
Less than 10 years old	35.3	45.1	60.7	21.5	16.5
11 – 20 years	35.0	45.9	62.7	21.6	17.0
21 – 30 years	33.5	44.9	63.5	22.6	18.7
30 – 40 years	29.2	37.5	55.3	30.9	14.3
40 – 60 years	22.2	35.9	50.8	35.7	10.5
More than 60 years	14.5	26.2	43.3	44.0	4.9
Geographical field of activity					
District or commune	34.4	46.3	62.0	23.3	18.6
Department	28.6	39.0	54.9	29.0	12.3
Region	25.2	37.8	50.7	29.4	9.2
Whole country	25.6	34.8	50.9	33.7	10.0
International	31.8	36.7	61.2	21.7	10.8
Number of members					
20 at the most	34.9	43.4	59.5	24.7	16.7
21 – 50	33.1	44.2	58.0	26.6	17.5
51 – 100	30.0	42.1	58.1	26.1	14.5
101 – 1000	29.2	41.3	58.0	26.4	13.5
More than 1000	21.8	32.8	51.5	31.4	8.3
Numbers of paid workers					
None (only volunteer staffed)	29.2	42.0	56.1	28.3	14.4
1 – 4	33.5	43.1	61.1	23.7	17.3
5 – 9	42.4	43.8	65.0	19.4	18.8
10 – 19	40.5	43.2	63.6	18.4	16.0
20 – 49	34.0	39.0	64.5	17.5	13.0
50 and over	31.3	32.3	65.7	17.2	7.1
Annual budget					
1000 euros at the most	31.8	41.6	55.1	30.1	16.2
1000 – 2000 euros	30.8	44.2	56.6	29.7	17.7
2000 – 5000 euros	32.5	45.9	58.6	25.7	17.6
5000 – 10000 euros	31.7	45.4	57.5	25.0	16.2
10000 – 25000 euros	30.7	42.1	61.3	23.5	14.5
25000 – 100000 euros	29.6	42.6	60.4	24.3	14.3
More than 100000 euros	30.9	34.5	56.2	26.1	9.9
Federation or network affiliation					
Yes	27.0	39.1	62.7	29.4	12.3
No	37.7	46.7	55.0	21.2	19.3
Total	31.4	42.3	58.2	26.1	15.2
Number of associations	8412				

Source : Sorbonne Economic Center Survey 2005

Note: Only associations whose characteristics of executive officers are known have been retained in this table.

Table 4. Trivariate probit estimates of having a woman who holds an officer position – All associations

Characteristics of associations	President position		Treasurer position		Secretary Position	
	Coef.	t-Test	Coef.	t-Test	Coef.	t-Test
Constant	-0.296**	-2.49	-0.279**	-2.46	0.058	0.51
Activity sector						
Leisure	0.319***	3.16	0.294***	3.05	0.357***	3.67
Sport	-0.291***	-2.95	-0.016	-0.17	-0.066	-0.72
Defense of rights and causes	-0.191*	-1.79	-0.048	-0.47	-0.063	-0.63
Cultural activities	0.233**	2.40	0.190**	2.03	0.331***	3.54
Health	0.462***	4.04	0.381***	3.41	0.478***	4.20
Charity and humanitarian action	0.527***	4.12	0.342***	2.71	0.417***	3.28
Social services	0.624***	5.69	0.440***	4.10	0.562***	5.18
Economic and local development	Ref		Ref		Ref	
Education and occupational integration	0.287**	2.41	0.148	1.27	0.167	1.44
Other	0.203	1.09	-0.072	-0.40	0.035	0.18
Number of volunteers						
5 at the most	Ref		Ref		Ref	
6 – 10	-0.121**	-2.38	-0.005	-0.11	0.036	0.73
11 – 19	-0.180***	-3.18	-0.029	-0.53	0.072	1.32
20 and over	-0.202***	-3.57	-0.021	-0.38	0.038	0.72
Paid employees						
At least one	0.402***	7.64	0.241***	4.81	0.331***	6.39
No	Ref		Ref		Ref	
Age of associations						
Less than 10 years old	Ref		Ref		Ref	
11 – 20 years	0.057	1.16	0.072	1.53	0.047	0.99
21 – 30 years	0.038	0.69	0.033	0.62	0.090*	1.69
31 – 40 years	-0.073	-1.08	-0.179***	-2.84	-0.089	-1.43
41 – 60 years	-0.262***	-3.49	-0.133**	-1.99	-0.163**	-2.42
More than 60 years	-0.488***	-5.62	-0.475***	-6.30	-0.328***	-4.61
Annual budget						
Less than 1000 euros	Ref		Ref		Ref	
1000 – 2000 euros	-0.009	-0.11	0.090	1.16	0.113	1.45
2000 – 5000 euros	0.078	1.10	0.190***	2.84	0.134**	1.98
5000 – 10000 euros	0.032	0.43	0.151**	2.12	0.110	1.56
10000 – 25000 euros	-0.001	-0.01	0.065	0.91	0.198***	2.76
25000 – 100000 euros	-0.148*	-1.80	0.010	0.13	0.071	0.90
More than 100000 euros	-0.423***	-4.50	-0.342***	-3.81	-0.274***	-3.05
Federation or network affiliation	-0.114***	-2.80	-0.031	-0.81	-0.078**	-1.97
Geographical field of activity						
District or commune	Ref		Ref		Ref	
Department	-0.183***	-3.95	-0.201***	-4.64	-0.231***	-5.35
Region	-0.262***	-4.38	-0.200***	-3.66	-0.313***	-5.71
Whole country	-0.178**	-2.02	-0.277***	-3.43	-0.285***	-3.61
International	-0.144*	-1.78	-0.226***	-2.90	-0.112	-1.42
Region						
Paris area	-0.017	-0.24	0.036	0.55	-0.018	-0.27
The Paris Basin	-0.046	-0.69	-0.015	-0.23	-0.013	-0.20
North	-0.385***	-3.88	-0.136	-1.50	-0.159*	-1.74
East	-0.178**	-2.31	-0.114	-1.57	-0.056	-0.77
West	-0.046	-0.68	0.044	0.68	-0.073	-1.11
South-West	-0.060	-0.80	-0.038	-0.53	-0.023	-0.32
Middle-East	-0.098	-1.41	0.077	1.18	0.103	1.54
Mediterranean	Ref		Ref		Ref	
Correlations						
President position	-		0.315***	14.81	0.302***	13.63
Treasurer position			-		0.304***	14.85
Secretary Position					-	
Number of female leaders	1762		2399		3375	
Number of associations	5709					
Log likelihood	-10386.68					

Source : Sorbonne Economic Center Survey 2005
Significance levels are respectively 1% (***), 5% (**) and 10% (*)

Table 5. Trivariate probit estimates of having a woman who holds an officer position – Associations with paid employees

Characteristics of associations	President position		Treasurer position		Secretary Position	
	Coef.	t-Test	Coef.	t-Test	Coef.	t-Test
Constant	0.005	0.27	0.023	0.12	0.261	1.42
Activity sector						
Leisure	0.409**	2.45	0.398**	2.43	0.630***	3.66
Sport	-0.020	-0.14	0.243*	1.72	0.280**	1.96
Defense of rights and causes	0.218	1.06	0.151	0.74	0.199	0.99
Cultural activities	0.177	1.17	0.319**	2.17	0.477***	3.23
Health	0.311	1.61	0.619***	3.01	0.291	1.48
Charity and humanitarian action	0.188	0.78	0.216	0.94	0.443*	1.91
Social services	0.711***	4.56	0.529***	3.48	0.768***	4.95
Economic and local development	Ref		Ref		Ref	
Education and occupational integration	0.247	1.42	0.303*	1.80	0.265	0.88
Other	0.043	0.10	-0.096	-0.19	0.546	1.38
Number of volunteers						
5 at the most	Ref		Ref		Ref	
6 – 10	-0.149*	-1.72	-0.071	-0.80	0.125	1.38
11 - 19	-0.289***	-2.99	-0.041	-0.43	0.087	0.88
20 and over	-0.339***	-3.51	-0.127	-1.34	-0.033	-0.35
Annual budget						
≤ 25000 €	Ref		Ref		Ref	
25000 – 50000 €	-0.212**	-2.18	0.159*	-1.68	-0.140	-1.43
50000 – 150000 €	-0.203**	-2.38	-0.296***	-3.33	-0.287***	-3.17
150000 – 300000 €	-0.501***	-4.24	-0.547***	-4.85	-0.474***	-4.15
300 000 – 600 000 €	-0.322**	-2.56	-0.393***	-3.13	-0.280**	-2.20
More than 600 000 €	-0.564***	-4.21	-0.624***	-4.71	-0.650***	-4.99
Age of associations						
Less than 10 years old	Ref		Ref		Ref	
11 – 20 years	0.175**	1.99	0.219**	2.49	0.053	0.58
21 – 30 years	0.075	0.75	0.094	0.96	0.125	1.25
31 – 40 years	-0.014	-0.12	0.087	0.79	-0.051	-0.46
41 – 60 years	-0.053	-0.41	0.133	1.09	0.026	0.21
More than 60 years	-0.341**	-2.44	-0.292**	-2.26	-0.281**	-2.26
Federation or network affiliation	-0.154**	-2.10	-0.075	-0.75	-0.047	-0.61
Geographical field of activity						
District or commune	Ref		Ref		Ref	
Department	-0.183**	-2.39	-0.278***	-3.70	-0.266***	-3.52
Region	-0.280***	-2.71	-0.338***	-3.47	-0.360***	-3.64
Whole country	-0.311*	-1.77	-0.355**	-2.36	-0.424***	-2.88
International	-0.287*	-1.85	-0.548***	-3.53	-0.437***	-2.89
Region						
Paris area	0.091	0.76	-0.006	-0.05	0.179	1.49
The Paris Basin	-0.037	-0.32	-0.027	-0.24	0.133	1.16
North	-0.268	-1.30	-0.296	-1.56	0.006	0.03
East	-0.001	-0.01	-0.103	-0.76	-0.041	-0.31
West	-0.037	-0.32	-0.036	-0.31	0.027	0.23
South-West	0.010	-0.08	-0.051	-0.38	0.032	0.24
Middle-East	0.048	0.40	-0.053	-0.45	0.202	1.64
Mediterranean	Ref		Ref		Ref	
Correlations						
President position	-		0.308***	8.33	0.247***	6.11
Treasurer position			-		0.233***	6.14
Secretary Position					-	
Number of female leaders	679		830		1216	
Number of associations	1901					
Log likelihood	-3471.24					

Source : Sorbonne Economic Center Survey 2005

Significance levels are respectively 1% (***), 5% (**) and 10% (*)